

Appl. No. 09/787,244
Amd dated August 20, 2004
Reply to Office Action of May 20, 2004

REMARKS

This amendment is responsive to the Office Action dated May 20, 2004. Applicant has canceled claim 1, has added claim 19, and has amended claims 2-18. Claims 2-19 are pending.

Claim Objections

The Examiner objected to claims 1-9 because claim 1 misspelled the word "root." Claim 1 has been canceled, mooted the objection.

Claim Rejections Under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 1, 5 and 8 under 35 U.S.C. § 102(b) as being anticipated by Brindley (U.S. Pat. No. 3,870,051). The Examiner further rejected claims 1-3, 8 and 11 under 35 U.S.C. § 102(b) as being anticipated by Fang et al. (U.S. Pat. No. 5,199,430). The Examiner further also rejected claims 1, 8 and 11 under 35 U.S.C. § 102(b) as being anticipated by Tanagho et al. (EP 0,245,547).

Applicants respectfully traverse the rejections to the extent such rejection may be considered applicable to the amended claims. Brindley, Fang et al. and Tanagho et al. fail to disclose each and every feature of the claimed invention, as required by 35 U.S.C. § 102(b), and provide no teaching that would have suggested the desirability of modification to include such features.

Claims 2-10 and 19

Claim 1, which was an independent claim that recited a method, has been canceled. Claim 19, which is an independent claim that recites a method, has been added. Claims 2-10, which formerly depended on claim 1, now depend upon claim 19.

Claim 19 recites the elements of the claimed method so as to avoid the Examiner's concerns. Claim 1 originally recited a method that comprised transmitting a series of stimulus pulses to first and second electrodes coupled, respectively, to a sacral ventral root of a patient and a sacral dorsal root corresponding to the ventral root. According to the Examiner, claim 1 failed to distinguish itself from the cited references because claim 1 did not contain any limitation to stimulating the sacral dorsal roots. The Examiner recommended, among other things, positively

Appl. No. 09/787,244
Amended August 20, 2004
Reply to Office Action of May 20, 2004

reciting stimulation of the dorsal roots. Claim 19, which supplants claim 1, specifically recites stimulating a sacral dorsal root.

Furthermore, the Examiner asserted that the cited references teach coupling of electrodes to the "complete" sacral nerve (what some authorities call a "spinal nerve," the structure formed by the joining of the dorsal and ventral roots), such that stimulation applied to a sacral ventral root will stimulate the corresponding sacral dorsal root as well, and vice versa. Claim 19 recites that the first series of stimulus pulses transmitted to the sacral ventral root are not transmitted to the sacral dorsal root, and that the second series of stimulus pulses transmitted to the sacral dorsal root are not transmitted to the sacral ventral root. Claim 19 therefore addresses the Examiner's concerns.

Applicant's amendments to claims 2-10 bring claims 2-10 in line with claim 19, assert the proper claim dependencies, delete some language for clarity, and correct various grammatical and stylistic matters.

Claims 11-18

Claim 11, as amended, is an independent claim directed to a device. Claims 12-18 depend upon claim 11.

As discussed above, the Examiner expressed concern that the claims did not contain any limitation to stimulating the sacral dorsal roots. Claim 11, as amended, recites that a second electrode, is adapted to be coupled to a sacral dorsal sacral root corresponding to a sacral ventral sacral root "and is further adapted to deliver a first series of stimulus pulses to the sacral dorsal root."

Claim 11, as amended, also addresses the Examiner's argument that the cited references teach devices that simultaneously stimulate the "complete" sacral nerve, and therefore these references disclose electrodes coupled to the dorsal and ventral roots. Claim 11, as amended, recites that the first electrode (adapted to couple to the ventral root and deliver a first series of pulses thereto) is not adapted to deliver the first series of stimulus pulses to the sacral dorsal root. Similarly, the second electrode (adapted to couple to the dorsal root and deliver a second series of pulses thereto) is not adapted to deliver the second series of stimulus pulses to the ventral root.

Appl. No. 09/787,244
Amd dated August 20, 2004
Reply to Office Action of May 20, 2004

The cited references do not disclose these limitations, and claim 11 addresses the Examiner's concerns.

Applicant's amendments to claims 12-18 bring claims 12-18 in line with claim 11, as amended, delete some language for clarity, and correct various grammatical and stylistic matters.

CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Date:

20 August 2004
SHUMAKER & SIEFFERT, P.A.
8425 Seasons Parkway, Suite 105
St. Paul, Minnesota 55125
Telephone: 651.735.1100
Facsimile: 651.735.1102

By:

Daniel J. Hanson
Name: Daniel J. Hanson
Reg. No.: 46,757